## NOTES

# A NEW SPECIES OF HYMENOLOBIUM (LEGUMINOSAEPAPILIONOIDEAE) FROM CENTRAL AMERICA 

Among the numerous trees of the Amazonian Hylea, the genus Hymenolobium is considered to be one of the main suppliers of excellent timber. It is closely related to the genus Andira (tribe Dalbergieae) but is distinguished by having a flat, reticulately veined fruit with one or two prominent submarginal nerves. Although delimitation of the species still presents various difficulties due to insufficient collections in herbaria, the 15-17 taxa previously recognized (Mattos, 1979; Lima, 1982) are restricted to South America from Venezuela and Surinam to southeastern Brazil.

During examination of material in the herbarium of the Missouri Botanical Garden (MO), some new collections from Central America were encountered. These represent a new species:
Hymenolobium mesoamericanum Lima, sp. nov. TYPE: Costa Rica. Heredia: alt. 220 m , Río Tirimbina, Istarú Farm, Tiribina, Sarapaquí, 16 July 1971 (fl), Roy W. Lent 2003 (holotype, MO; isotypes, NY, US). Figure 1.

A omnibus specibus fructibus alatis adhuc cognitis floribus majoribus ( $18-20 \mathrm{~mm}$ ) et calycibus tenue-coriaceis pubescentis differt.

Large tree to 40 m , dbh to 90 cm . Trunk with smooth, grayish bark; wood yellow. Terminal branches grayish, with numerous scars of caducous leaves, pubescent on the newest growth. Stipules caducous, ovate-lanceolate, 1-1.4 $\times 0.5-0.9 \mathrm{~cm}$, stipels filiform, $0.1-0.2 \mathrm{~cm}$ long. Leaves imparipinnate, aggregated at the branch apices, 8-17jugate (up to 25 -jugate on regrowth branches or young plants); petiole pubescent, $2.5-4 \mathrm{~cm}$ long (to 6 cm long on regrowth branches or young plants); rachis pubescent, $12-28 \mathrm{~cm}$ long (to 56 cm long on regrowth branches or young plants); leaflets oblong, oblong-elliptic or ovate-oblong, the terminal one elliptic, 2.5-7 $\times 1.5-3 \mathrm{~cm}$, the base rounded, subcordate or obtuse, the apex retuse or obtuse, mucronate, the lower face pubescent, the upper face sparsely pubescent to subglabrous; petiolules $1.5-2.5 \mathrm{~mm}$ long. Panicles $10-15 \times 15-$

22 cm , the branches pubescent; bracts and bracteoles caducous, the bracteoles ovate-lanceolate, pubescent, $1-1.5 \times 0.5-0.7 \mathrm{~mm}$. Flowers $18-20$ mm long; pedicels $5-8 \mathrm{~mm}$ long; calyx campanulate, slightly coriaceous, pubescent, 5 -toothed, 8 10 mm long; corolla rose, the petals papery; vexillum $16-18 \times 14-15 \mathrm{~mm}$, wings $15-17 \times 5-6$ mm ; keel $14-16 \times 5-6 \mathrm{~mm}$; stamens 10 , monadelphous, $15-16 \mathrm{~mm}$ long; anthers $0.8-1 \times 0.3-$ 0.4 mm ; ovary long-stipitate, pilose along the margins; ovules $2-3$; style sparsely pilose, the stigma punctiform. Immature fruit flat, with wide lateral wings.

Habitat and distribution. Emergent tree of gallery forests of low altitude ( $50-300 \mathrm{~m}$ ), or left uncut in pasture land, in Costa Rica, Nicaragua, and Panama.

Additional material examined. Costa Rica. heredia: along Río Frio Road, after entrance to Starke's hacienda, 25 Apr. 1976 (fl, lvs), G. S. Hartshorn 1843 (MO, NY). Nicaragua. zelaya: Kurinwacito, 18-22 Mar. 1984 (lvs), P. P. Moreno 23688 (MO, RB); 23 Mar. 1984 (lvs), P. P. Moreno 23862 (MO, RB); ca. 1.5 km W of Cara de Mono, 6 June 1980 (lvs), W. D. Stevens 17500 (MO); Awas Tingni, 40 km S de Waspán, 20 Mar. 1971 (lvs), E. L. Little, Jr. 25272 (MO, US). Panama. canal zone: hills north of Frijoles, 19 Dec. 1923 (lvs), P. C. Standley 27584 (US).

Hymenolobium mesoamericanum is distinguished from other species in the genus principally by its large flowers $(18-20 \mathrm{~mm})$ with slightly coriaceous, pubescent calyces. It shows affinities with H. heterocarpum, which possesses slightly larger flowers $(22-23 \mathrm{~mm})$ with coriaceous, tomentose calyces and suborbicular to oblong-reniform fruits with rudimentary lateral wings. The young fruit of H. mesoamericanum is provided with wide lateral wings, which suggest a samaroid fruit type as found in the majority of the species in the genus. However, collections of completely mature fruit are necessary to confirm this character.

Size and consistency of leaflets frequently vary in species of Hymenolobium (Lima, 1982). The

variation is related to leaf fall and/or to environmental factors, mainly intensity of solar radiation. The latter element determines the development of smaller, more rigid leaflets on the upper branches of the crown of adult individuals than on lower (regrowth) branches or on young individuals (Fig. lf, g).

The wood of this species supplies planks for construction and is commonly called "colepáo" (Costa Rica, Prov. Heredia) and "carolillo" or "nogal" (Nicaragua, Dept. Zelaya).

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Figure 1. Hymenolobium mesoamericanum.-a. Flower.-b. Bud.-c. Androecium.—d. Pistil.-e. Corolla (Lent 2003).-f. Leaflet from the upper branches of adult individual (Moreno 23688).-g. Leaflet from young individual (Standley 27584).

